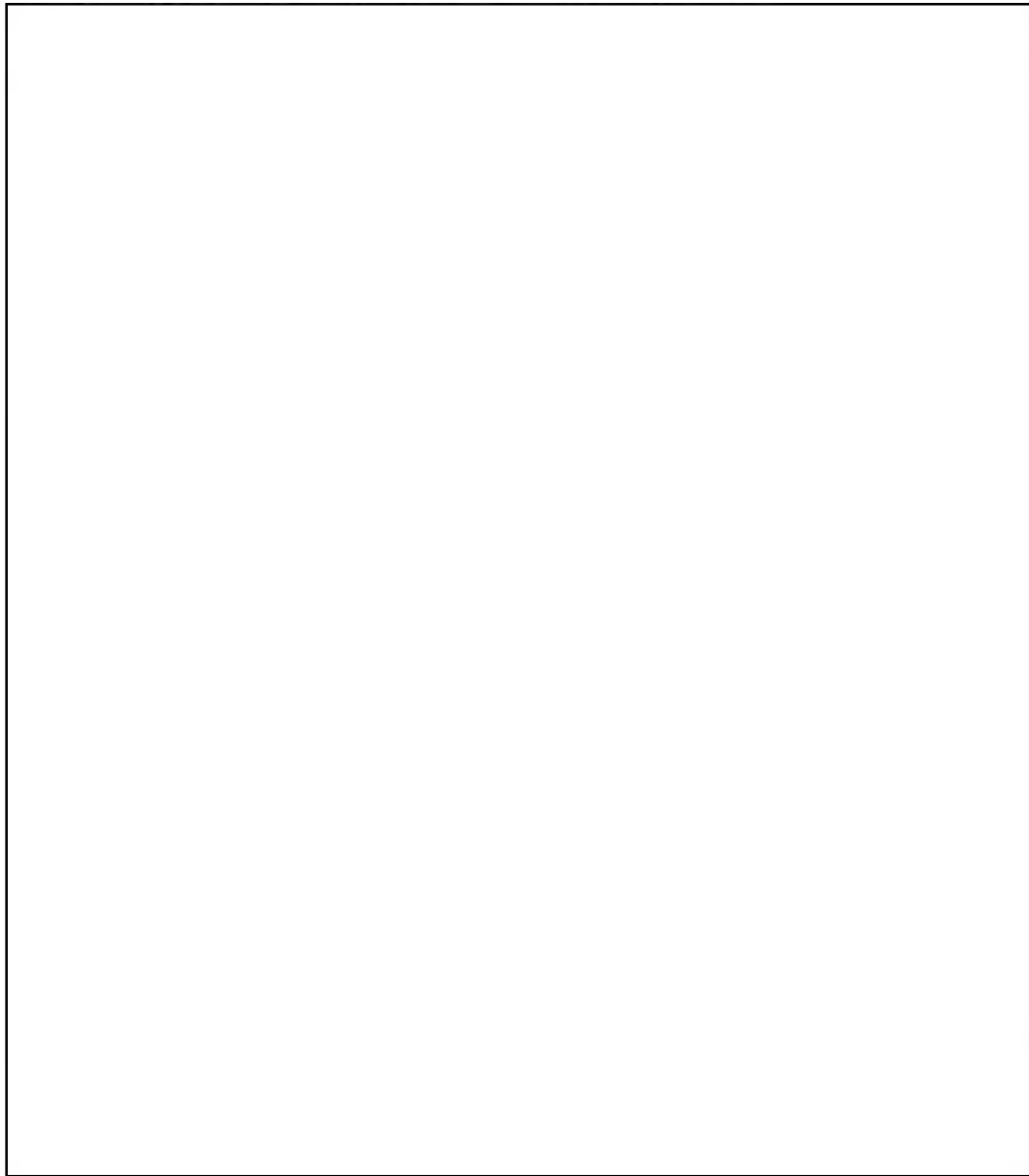

Functional description

Controls and indicators

The HSDC supports full duplex (FDX) mode only in asynchronous transmission. In synchronous transmission, it supports both full duplex (FDX) and half duplex (HDX) operational modes.

In asynchronous or synchronous transmission modes, each port operates independently of the other. Each port adapts to the mode of the originating (calling) Meridian 1 data module, except for the Asynchronous/Synchronous mode. Asynchronous/Synchronous modes are set up by SW2 for Port C and SW4 for Port A. The modes are controlled by the switches mounted on the QPC918 faceplate. The layout of the faceplate is shown in Figure 1.

Figure 1
High Speed Data Card (HSDC) faceplate (illustration not available)



Mode switches

The HSDC has four recessed 8-position DIP mode switches. The functions controlled by these switches follow:

SW2 (Port C), SW4 (Port A)		SW1 (Port C), SW3 (Port A)	
S 1:	OFF/Hot Line (htl)	S 1:	SL-1 or DMS\SL-100
S 2:	OFF/Forced Digitone Receiver (fdtr)	S 2:	Terminal/Host
S 3:	HDX/FDX	S 3:	Reserved 1
S 4:	Asynch/Sync	S 4:	Reserved 2
S 5:	Ext/Int Clock	S 5:	D3-Speed Selection
S 6:	Modem/Network	S 6:	D2-Speed Selection
S 7:	Manual/Auto Answer	S 7:	D1-Speed Selection
S 8:	OFF/Loopback (lpbk)	S 8:	D0-Speed Selection

Only the options on the right side, such as **htl**, **fdtr**, and **FDX**, are labeled on the faceplate.

An echo mode is not provided as an option, but characters will be echoed during keyboard dialing.

Virtual Leased Line

To control the Virtual Leased Line (VLL) mode, set SW2 or SW4 to the **htl** and **fdtr** position. In the VLL mode, the HSDC waits 1.5 seconds after the call is disconnected and then begins to hot line continuously. The HSDC waits 40 seconds for the call to connect before aborting the call and starting over. Stop the VLL by setting either the Hot Line (**htl**) or Forced Digitone Receiver (**fdtr**) switch to the OFF position.

SW2, SW4 definitions

S 1—OFF/Hot Line (htl). This switch is provided for the user who wishes to always access a particular data station. An autodial is initiated whenever the DTR lead goes from OFF to ON.

S 2—OFF/Forced DTR (fdtr). This switch forces the DTR lead to be high. This mode allows the High Speed Data Module (HSDM) to originate or answer a data call in the absence of a true hardware DTR.

S 3—HDX/FDX. This switch is provided for half or full duplex data transmission.

S 4—Asynch/Synch. This switch is provided for asynchronous or synchronous data transmission.

S 5—Ext/Int Clock. The external clock of the Ext/Int Clock Switch is used when the device connected to the HSDC controls the transmit clock. The internal clock is used when the HSDC controls the transmit clock. The receive clock is always controlled by the HSDC.

S 6—Modem/Network. In the synchronous mode, the modem setup of the switch is used for all connections except for connection to a digital network, such as through a Digital Service Unit (DSU) when the HSDC port clock (Txc and Rxc) is synchronized to the DSU's clock (Txc and Rxc).

S 7—Manual/Auto Answer. This switch is provided for the user to answer an incoming call manually or automatically. To manually answer an incoming call, enter carriage return <CR>. In the asynchronous mode, the HSDC provides both manual and auto-answer capability. In the synchronous mode, only auto-answer is provided. **A manual setting will result in the call not being answered.**

S 8—OFF/Loopback. This switch permits the local calling HSDC to force the far end data module into a Remote Loopback test mode. The switch is provided for maintenance personnel to diagnose problems. Refer to "Troubleshooting" on page 43 for diagnostic and maintenance procedures.

SW1, SW3 definitions

S 1—SL-1 or DMS\SL-100. Because of the protocol difference between the HSDC and the DMS\SL-100 Data Unit (DU), when the DU calls the HSDC in the synchronous mode, the HSDC always goes into a full duplex mode. If half duplex mode is desired, the HSDC should have the **SL-1** or **DMS\SL-100** switch set to **DMS\SL-100**. Setting the switch to **DMS\SL-100** still allows the HSDC to answer the call automatically, but in the half duplex mode.

S 2—Terminal/Host. In the asynchronous mode, when the switch is set to **terminal**, prompts are provided for keyboard dialing. When the switch is set to **host**, prompts are not sent to the DTE.

S 3 and S 4—These switches are reserved for future use and should be set to the OFF position.

S 5 to S 8—These switches are reserved for synchronous speed selection.

Data Port Status lamps

Table 1 gives the definitions of the Data Port Status lamps.

Table 1
Data Port Status lamps

Indicator	Description
V.35	The V.35 LED lights when the HSDC is internally configured for the V.35 interface.
CONN	The CONNECT lamp is lit when a data call is connected between the HSDC port and the data module at the far end.
DTR	The DTR LED is lit to indicate that the DTR is ON from the attached device or is forced ON by the Forced DTR setting.
RD	The RD LED is lit when the DTE receives data.
SD	The SD LED is lit when the DTE transmits data.

Keyboard dialing

Keyboard dialing (KBD) allows the user to initiate and terminate data calls to in-house or remote hosts using the terminal keyboard of a DTE.

KBD capability is supported for ASCII, asynchronous, character mode, interactive terminals equipped with an EIA RS-232-C or CCITT V.35 interface. It is not provided for synchronous or block mode terminals.

The HSDC and KBD provide the following features and capabilities:

- Call origination to local and remote hosts
- Ring Again capability
- Autodial data calling
- Speed Call data calling
- Auto-answer
- Manual-answer
- Asynchronous data transmission rate of 110, 150, 300, 600, 1200, 2400, 4800, 9600, 19200 bps
- Asynchronous Mode Autobaud and Autoparity features. On initial power up, a default speed of 1200, 2400, 4800, 9600, or 19200 bps is used. The default speed is selected by the SYNC speed switch setting. If the switch is not set to any of the five speed settings, the HSDC defaults to 9600 bps.
- The HSDC detects the speed on receipt of the carriage-return (<CR>) character. If the parity of the terminal matches the HSDC default setting (8 bits, no parity), the HSDC echoes a legible prompt on the screen. If the parity does not match, an illegible prompt appears on the screen. **When this happens, enter a period (.) and carriage-return (<CR>) to force the HSDC to detect the parity and to echo a legible prompt on the screen.**

- After having autobauded once, the HSDC remembers the current speed and continues to use the same speed if not again autobauded.
- The HSDC returns to the default mode when
 - The terminal powers OFF and ON
 - After a Control Z, Break, DTR OFF, or call disconnection from the far end

For complete descriptions of all keyboard dialing procedures, see the *High Speed Data Module user guide* (P0696749).